

Science Y5 Spring 1 – Living things and their habitats

In this unit of work the children will identify the similarities and differences in the life cycles of a mammal, an amphibian, an insect, and a bird. They will describe the life processes of reproduction in some plants and animals.

In this unit children will:

Describe the differences in the life cycles of a mammal, an amphibian, an insect, and a bird

Describe the life processes of reproduction in some plants and animals

Observe life cycle changes in a variety of living things for example plants in a flower border and animals in their local habitat.

Research the work of naturalists and animal behaviourists such as David Attenborough

Find out about the different types of reproduction, including sexual and asexual in plants, and sexual reproduction in animals.

Compare the life cycle of a mammal, an amphibian, an insect and a bird, using secondary sources or first-hand evidence. Draw the life cycles identifying similarities and differences between them, identifying any patterns

Grow plants from cuttings and observe over time

Prior Learning

F.S Know how to care for living things

Y1 Naming common animals and the structure of plants

Y2 Lifecycles of humans/animals/plants

Y3 Function and parts of a plant

Y4 Animals can be grouped into vertebrates and invertebrates

Cross Curricular Links

PSHCE - Relationships

Key Vocabulary

Cell – The smallest part of a plant or animal that can function independently.

Dispersed – Scattered, separated, or spread through a large area.

Embryo – An unborn animal or human being in the very early stages of development.

Fertilisation – Male and female gametes meet to form an embryo or seed.

Gamete – The name for the 2 types of male and female cell that join to make a new creature.

Life cycle – The series of changes that an animal or plant passes through from the beginning of life until death.

Metamorphosis – A person, or thing develops and changes into something completely different.

Ovary – A female organ which produces eggs.

Pollination – To fertilise it with pollen.

Key Knowledge

Reproduction is when an animal or plant produces one or more individuals like itself.

Sexual reproduction requires 2 parents with male and female gametes (cells). They will produce offspring that is like but not identical to its parent.

Asexual reproduction will produce offspring that is identical to the parent. It only requires one parent. In the reproduction of plants male gametes are found in the pollen.

Female gametes can be found in the ovary.

Pollination occurs when pollen from the anther is transferred to the stigma by bees and other insects.

The pollen travels down and meets the ovule. When this happens, seeds are formed – this is fertilisation.

Seeds are then dispersed so that germination can begin again.



The life cycles of mammals, birds, amphibians, and insects have similarities and differences.

One difference is that amphibians go through the process of metamorphosis. This is when the structure of their body changes significantly as they grow e.g. tadpole to frog and caterpillar to

Key Questions

What is similar about the life cycle of a mammal, amphibian, insect, and bird? What is different?

Why are the life cycles of local plants and animals different to those for example in the rainforest, ocean, or desert?

What has the work of David Attenborough taught us?